

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A resist composition comprising a base polymer and a fluorochemical surfactant which functions to reduce the contact angle at the interface between the surface of the resist composition coated onto a substrate and water or an aqueous base developer as the amount of the fluorochemical surfactant increases wherein said fluorochemical surfactant is of the following formula (1):



wherein  $R^1$  is hydrogen, a hydroxyl group, a straight, branched or cyclic alkoxy group of 1 - 6 carbon atoms, or an alkylcarbonyloxy group whose alkyl moiety has 1 - 6 carbon atoms,  $R^2$  is hydrogen or a straight, branched or cyclic alkyl group of 1 - 6 carbon atoms,  $a$  is a positive integer of 0 - 6,  $m$  is equal to 0 or 1, and  $n$  is a positive integer of 1 - 40, each of  $R^f$  and  $R^{f1}$ , which may be the same or different, is a straight, branched or cyclic fluoroalkyl group having 1 - 12 carbon atoms, in which all groups attached to its carbon atoms are fluorine atoms or some are fluorine atoms and the remainder are hydrogen atoms.

2. Canceled

3. (Original) The resist composition of claim 1, which is of chemical amplification type and to be exposed to high-energy radiation having a wavelength of 500 nm or less, x-rays or electron beams.

4. (Canceled)

5. (Canceled)

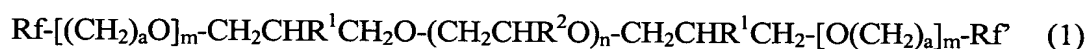
6. (Previously Presented) A chemically amplified positive working resist composition

comprising:

a base resin of an alkali-insoluble or scarcely soluble resin having acidic functional groups protected with acid-labile groups wherein the resin becomes alkali soluble when the acid-labile groups are eliminated;

a photo-acid generator capable of generating acid upon exposure to deep UV, X-rays or electron beams; and

a fluorochemical surfactant functioning to reduce the contact angle at the interface between the surface of the resist composition coated onto a substrate and water or an aqueous base developer as the amount of the fluorochemical surfactant increases wherein said fluorochemical surfactant is of the formula (1):



wherein  $\text{R}^1$  is hydrogen, a hydroxyl group, a straight, branched or cyclic alkoxy group of 1 - 6 carbon atoms, or an alkylcarbonyloxy group whose alkyl moiety has 1 - 6 carbon atoms,  $\text{R}^2$  is hydrogen or a straight, branched or cyclic alkyl group of 1 - 6 carbon atoms,  $a$  is a positive integer of 0 - 6,  $m$  is equal to 0 or 1, and  $n$  is a positive integer of 1 - 40, each of  $\text{Rf}$  and  $\text{Rf}'$ , which may be the same or different, is a straight, branched or cyclic fluoroalkyl group having 1 - 12 carbon atoms, wherein all groups attached to its carbon atoms are fluorine atoms or some are fluorine atoms and the remainder are hydrogen atoms.

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Previously Presented)  
methoxy or acetoxy.

The resist composition of claim 1 wherein R<sup>1</sup> is a hydroxyl,

13. (Previously Presented)  
methyl.

The resist composition of claim 1 wherein R<sup>2</sup> a hydrogen or

14. (Previously Presented)  
integer of 0 - 2.

The resist composition of claim 1 wherein a is a positive

15. (Previously Presented)  
integer of 2 - 8.

The resist composition of claim 1 wherein n is a positive

16. (Previously Presented)

The resist composition of claim 1 wherein R<sub>f</sub> and R<sub>f</sub>' are, independently, perfluorobutyl, perfluorohexyl, perfluorooctyl, perfluorodecyl, perfluoro-3-methylbutyl, perfluoro-5-methylhexyl, perfluoro-7-methyloctyl, perfluoro-9-methyldecyl, 2H-tetrafluoroethyl, 4H-octafluorobutyl, 6H-dodecafluorohexyl, or 8H-hexadecafluorooctyl.

17. (Previously Presented)

The resist composition of claim 1 wherein the fluorochemical surfactant is blended in the resist composition in an amount of 10 to 2,000 parts by weight per million parts by weight of the composition.

18. (Previously Presented)

The resist composition of claim 1 wherein the fluorochemical surfactant is blended in the resist composition in an amount of 50 to 700 parts by weight per million parts by weight of the composition.

19. (Previously Presented)

The resist composition of claim 1 wherein the base polymer is polyhydroxystyrene, poly[(t-butyl acrylate)-(hydroxystyrene)] copolymer, poly[(t-butyl

methacrylate)-(methyl methacrylate)-(polymethacrylic acid)] copolymer, or poly[(t-butyl-5-norbornene-2-carboxylate)-(maleic anhydride)-(5-norbornene-2,3-dicarboxylic anhydride)] copolymer.

20. (Currently Amended) A resist composition for g-line or i-line comprising:  
a novolak resin;  
a naphthoquinonediazide compound; and  
a fluorochemical surfactant functioning to reduce the contact angle at the interface between the surface of the resist composition coated onto a substrate and water or an aqueous base developer as the amount of the fluorochemical surfactant increases.

~~The resist composition of claim 10~~ wherein said fluorochemical surfactant is of the following formula (1):



wherein  $R^1$  is hydrogen, a hydroxyl group, a straight, branched or cyclic alkoxy group of 1 - 6 carbon atoms, or an alkylcarbonyloxy group whose alkyl moiety has 1 - 6 carbon atoms,  $R^2$  is hydrogen or a straight, branched or cyclic alkyl group of 1 - 6 carbon atoms,  $a$  is a positive integer of 0 - 6,  $m$  is equal to 0 or 1, and  $n$  is a positive integer of 1 - 40, each of  $Rf$  and  $Rf^1$ , which may be the same or different, is a straight, branched or cyclic fluoroalkyl group having 1 - 12 carbon atoms, in which all groups attached to its carbon atoms are fluorine atoms or some are fluorine atoms and the remainder are hydrogen atoms.--